

What Is Claimed Is:

1. A network application decentralized execution system which allows application of a network application developed for a concentrated switched network to a decentralized switched network, comprising:

a network application server; and

a terminal equipment including connection state variation detection means for detecting a variation of a connection state of said terminal equipment, connection state control means for controlling the connection state of said terminal equipment, and plug-in means for plugging in an application execution script downloaded from said network application server.

2. A network application decentralized execution system as claimed in claim 1, further comprising a database, and wherein said plug-in means records time for which the application execution script is executed into said database.

3. A network application decentralized execution system which allows application of a network application developed for a concentrated switched network to a decentralized switched network, comprising:

a network application server; and

a terminal equipment;

said network application server including an application storage section for storing an application execution script for a concentrated switched network, a subscriber information storage section for storing corresponding relationships between

subscribers and network applications used by the subscribers,  
a subscriber/application information management section for  
managing said application storage section and said subscriber  
information storage section, and a data transmission/reception  
5 section for exchanging data with said terminal equipment;

said terminal equipment including an application storage  
section for storing the application execution script downloaded  
from said network application server, an application control  
section for executing a network application and managing said  
10 application storage section, a state variation detection  
section for supervising an event designated by the network  
application and issuing, if the event occurs, a notification  
of the occurrence of the event to said application control section,  
a call state storage section for storing a call state of said  
15 terminal equipment and another terminal equipment of the other  
party of the communication, a connection state control section  
for managing said call state storage section, and a data  
transmission/reception section for exchanging data with the  
terminal equipment of the other party and said network  
20 application server.

4. A network application decentralized execution system  
as claimed in claim 3, wherein said application control section  
includes and uses an application programming interface for a  
concentrated switched network to control said call state storage  
25 section and said connection state control section.

5. A network application decentralized execution system

as claimed in claim 4, wherein said application control section has, as a function of the application programming interface, a function of detecting an event and issuing a notification of the occurrence of the event to the application execution script.

6. A network application decentralized execution system as claimed in claim 4, wherein said application control section has, as a function of the application programming interface, a function of causing the application execution script to place said terminal equipment into a connection state and a communication state.

7. A network application decentralized execution system as claimed in claim 4, wherein said application control section has, as a function of the application programming interface, a function of causing the application execution script to control the connection state of said terminal equipment.

8. A network application decentralized execution system as claimed in claim 4, wherein said application control section has, as a function of the application programming interface, a function of causing the application execution script to interact with a user through said terminal equipment.

9. A network application decentralized execution system as claimed in claim 4, wherein said application control section has, as a function of the application programming interface, a function of causing the application execution script to access said network application server.

10. A network application decentralized execution system as claimed in claim 4, wherein said application control section has, as a function of the application programming interface, a function of causing the application execution script to call a process of a concentrated server.

11. A network application decentralized execution system as claimed in claim 4, wherein said application control section has, as a function of the application programming interface, a function of ending an execution state of the application execution script.

12. A network application decentralized execution system which allows application of a network application developed for a concentrated switched network to a decentralized switched network, comprising:

a network application server;

a terminal equipment; and

a database connected to said terminal equipment;

said network application server including an application storage section for storing an application execution script for a concentrated switched network, a subscriber information storage section for storing corresponding relationships between subscribers and network applications used by the subscribers, a subscriber/application information management section for managing said application storage section and said subscriber information storage section, and a data transmission/reception section for exchanging data with said terminal equipment;

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said terminal equipment including an application storage section for storing the application execution script downloaded from said network application server, an application control section for executing a network application and managing said application storage section, a state variation detection section for supervising an event designated by the network application and issuing, if the event occurs, a notification of the occurrence of the event to said application control section, a call state storage section for storing a call state of said terminal equipment and another terminal equipment of the other party of the communication, a connection state control section for managing said call state storage section, and a data transmission/reception section for exchanging data with the terminal equipment of the other party and said network application server;

said database being connected to said data transmission/reception section of said terminal equipment.

13. A network application decentralized execution system as claimed in claim 12, wherein said application control section includes and uses an application programming interface for a concentrated switched network to control said call state storage section and said connection state control section.

14. A network application decentralized execution system as claimed in claim 13, wherein said application control section has, as a function of the application programming interface, a function of detecting an event and issuing a

notification of the occurrence of the event to the application execution script.

15. A network application decentralized execution system as claimed in claim 13, wherein said application control  
5 section has, as a function of the application programming interface, a function of causing the application execution script to place said terminal equipment into a connection state and a communication state.

16. A network application decentralized execution  
10 system as claimed in claim 13, wherein said application control section has, as a function of the application programming interface, a function of causing the application execution script to control the connection state of said terminal equipment.

15 17. A network application decentralized execution system as claimed in claim 13, wherein said application control section has, as a function of the application programming interface, a function of causing the application execution script to interact with a user through said terminal equipment.

20 18. A network application decentralized execution system as claimed in claim 13, wherein said application control section has, as a function of the application programming interface, a function of causing the application execution script to access said network application server.

25 19. A network application decentralized execution system as claimed in claim 13, wherein said application control

section has, as a function of the application programming interface, a function of causing the application execution script to call a process of a concentrated server.

20. A network application decentralized execution  
5 system as claimed in claim 13, wherein said application control section has, as a function of the application programming interface, a function of ending an execution state of the application execution script.

21. A network application decentralized execution  
10 system as claimed in claim 12, wherein said application control section writes a period of time within which the application execution script is executed into said database.

22. A terminal equipment which cooperates with a network  
15 application server to form a network application decentralized execution system which allows application of a network application developed for a concentrated switched network to a decentralized switched network, comprising:

connection state variation detection means for detecting  
a variation of a connection state of said terminal equipment;  
20 connection state control means for controlling the connection state of said terminal equipment; and

plug-in means for plugging in an application execution script downloaded from said network application server.

23. A terminal equipment which cooperates with a network  
25 application server to form a network application decentralized execution system which allows application of a network

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application developed for a concentrated switched network to a decentralized switched network, comprising:

an application storage section for storing the application execution script downloaded from said network application server;

an application control section for executing a network application and managing said application storage section;

a state variation detection section for supervising an event designated by the network application and issuing, if the event occurs, a notification of the occurrence of the event to said application control section;

a call state storage section for storing a call state of said terminal equipment and another terminal equipment of the other party of the communication;

a connection state control section for managing said call state storage section; and

a data transmission/reception section for exchanging data with the terminal equipment of the other party and said network application server.

24. A terminal equipment as claimed in claim 23, wherein said application control section includes and uses an application programming interface for a concentrated switched network to control said call state storage section and said connection state control section.

25. A terminal equipment as claimed in claim 24, wherein the application programming interface has a function of



detecting an event and issuing a notification of the occurrence of the event to the application execution script.

26. A terminal equipment as claimed in claim 24, wherein the application programming interface has a function of causing the application execution script to place said terminal equipment into a connection state and a communication state.

27. A terminal equipment as claimed in claim 24, wherein the application programming interface has a function of causing the application execution script to control the connection state of said terminal equipment.

28. A terminal equipment as claimed in claim 24, wherein the application programming interface has a function of causing the application execution script to interact with a user through said terminal equipment.

29. A terminal equipment as claimed in claim 24, wherein the application programming interface has a function of causing the application execution script to access said network application server.

30. A terminal equipment as claimed in claim 24, wherein the application programming interface has a function of causing the application execution script to call a process of a concentrated server.

31. A terminal equipment as claimed in claim 24, wherein the application programming interface has a function of ending an execution state of the application execution script.

32. A terminal equipment which cooperates with a network

application server and a database to form a network application decentralized execution system which allows application of a network application developed for a concentrated switched network to a decentralized switched network, comprising:

5           an application storage section for storing the application execution script downloaded from said network application server;

          an application control section for executing a network application and managing said application storage section;

10           a state variation detection section for supervising an event designated by the network application and issuing, if the event occurs, a notification of the occurrence of the event to said application control section;

          a call state storage section for storing a call state of said terminal equipment and another terminal equipment of the other party of the communication;

          a connection state control section for managing said call state storage section; and

20           a data transmission/reception section connected to said database for exchanging data with the terminal equipment of the other party and said network application server.

33. A terminal equipment as claimed in 32, wherein said application control section includes and uses an application programming interface for a concentrated switched network to control said call state storage section and said connection state control section.

34. A terminal equipment as claimed in claim 32, wherein the application programming interface has a function of detecting an event and issuing a notification of the occurrence of the event to the application execution script.

5           35. A terminal equipment as claimed in claim 32, wherein the application programming interface has a function of causing the application execution script to place said terminal equipment into a connection state and a communication state.

10           36. A terminal equipment as claimed in claim 32, wherein the application programming interface has a function of causing the application execution script to control the connection state of said terminal equipment.

15           37. A terminal equipment as claimed in claim 32, wherein the application programming interface has a function of causing the application execution script to interact with a user through said terminal equipment.

20           38. A terminal equipment as claimed in claim 32, wherein the application programming interface has a function of causing the application execution script to access said network application server.

          39. A terminal equipment as claimed in claim 32, wherein the application programming interface has a function of causing the application execution script to call a process of a concentrated server.

25           40. A terminal equipment as claimed in claim 32, wherein the application programming interface has a function of ending

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an execution state of the application execution script.

41. A terminal equipment as claimed in claim 31, wherein  
said application control section writes a period of time within  
which the application execution script is executed into said  
5 database.

42. An execution method of a network application for a  
network application decentralized execution system which  
includes a network application server and a terminal equipment  
and allows application of a network application developed for  
10 a concentrated switched network to a decentralized switched  
network, comprising:

a first step of detecting a variation of a connection  
state between said network application server and said terminal  
equipment;

15 a second step of controlling the connection state in  
response to the variation detected by the first step; and

a third step of for plugging in an application execution  
script downloaded from said network application server.

43. An execution method of a network application as  
20 claimed in claim 42, further comprising a step of recording  
time for which the application execution script is executed.

44. An execution method of a network application for a  
network application decentralized execution system which  
includes a network application server and a terminal equipment  
25 and allows application of a network application developed for  
a concentrated switched network to a decentralized switched

network, comprising:

a first step of downloading a network application from said network application server into said terminal equipment;

5 a second step of setting a first trigger for starting up the received network application to said terminal equipment;

a third step of starting up the network application when the first trigger is fired; and

a fourth step of ending the execution of the network application when a particular operation is performed.

10 45. An execution method of a network application as claimed in claim 44, further comprising a step of setting a second trigger for starting up a next operation when the first trigger is fired.

15 46. An execution method of a network application as claimed in claim 44, further comprising a step of setting an N+1th trigger for starting up a next operation when an Nth trigger is fired, N being a positive integer greater than 1.

20 47. An execution method of a network application as claimed in claim 44, wherein the first step includes the steps of:

using, when power supply to said terminal equipment is switched on, the switching on of the power supply as a trigger to start up a network application for allowing selection from among services which can be used by said terminal equipment;

25 transmitting subscriber identification information from said terminal equipment to said network application server;

preparing a list of network applications which can be used by a user of said terminal equipment based on the subscriber identification information by said network application server and transmitting the list from said network application server to said terminal equipment;

selecting one of the network applications from within the list by the user of said terminal equipment; and

downloading the selected network application from said network application server to said terminal equipment.

48. An execution method of a network application as claimed in claim 44, further comprising a step of storing the network application downloaded from said network application server into said terminal equipment.

49. An execution method of a network application as claimed in claim 44, further comprising a step of issuing, when the first trigger is fired, before the network application is started up, an inquiry from said terminal equipment to a user of said terminal equipment regarding whether or not the network application may be started up.

50. An execution method of a network application as claimed in claim 45, further comprising a step of issuing, when the first trigger is fired, before the network application is started up, an inquiry from said terminal equipment to a user of said terminal equipment regarding whether or not the network application may be started up, and wherein the second trigger is set only when the user consents to starting up of the network

application.

51. An execution method of a network application as claimed in claim 46, further comprising a step of issuing, when the first trigger is fired, before the network application is started up, an inquiry from said terminal equipment to a user of said terminal equipment regarding whether or not the network application may be started up, and wherein the second to N+1th triggers are set only when the user consents to starting up of the network application.

52. An execution method of a network application as claimed in claim 44, further comprising a step of recording time for which the network application is executed.

53. An operation method for a terminal equipment which cooperates with a network application server to form a network application decentralized execution system which allows application of a network application developed for a concentrated switched network to a decentralized switched network, comprising:

a first step of detecting a variation of a connection state between said terminal equipment and said network application server;

a second step of controlling the connection state in response to the variation detected by the first step; and

a third step of plugging in an application execution script downloaded from said network application server.

54. An operation method for a terminal equipment as

claimed in claim 53, further comprising a step of recording time for which the application execution script is executed.

55. An operation method for a terminal equipment which cooperates with a network application server to form a network application decentralized execution system which allows application of a network application developed for a concentrated switched network to a decentralized switched network, comprising:

a first step of downloading a network application from said network application server into said terminal equipment;

a second step of setting a first trigger for starting up the received network application to said terminal equipment;

a third step of starting up the network application when the first trigger is fired; and

a fourth step of ending the execution of the network application when a desired operation is performed.

56. An operation method for a terminal equipment as claimed in claim 55, further comprising a step of setting a second trigger for starting up a next operation when the first trigger is fired.

57. An operation method for a terminal equipment as claimed in claim 55, further comprising a step of setting an N+1th trigger for starting up a next operation when an Nth trigger is fired, N being a positive integer greater than 1.

58. An operation method for a terminal equipment as claimed in claim 55, wherein the first step includes the steps



executed by said terminal equipment of:

using, when power supply to said terminal equipment is  
switched on, the switching on of the power supply as a trigger  
to start up a network application for allowing selection from  
among services which can be used by said terminal equipment;

transmitting subscriber identification information to  
said network application server;

receiving a list of network applications which can be  
used by a user of said terminal equipment prepared based on  
the subscriber identification information by and transmitted  
from said network application server; and

downloading one of the network applications of the list  
selected by a user of said terminal equipment from said network  
application server.

59. An operation method for a terminal equipment as  
claimed in claim 55, further comprising a step of storing the  
network application downloaded from said network application  
server into said terminal equipment.

60. An operation method for a terminal equipment as  
claimed in claim 55, further comprising a step of issuing, when  
the first trigger is fired, before the network application is  
started up, an inquiry to a user of said terminal equipment  
regarding whether or not the network application may be started  
up.

61. An operation method for a terminal equipment as  
claimed in claim 56, further comprising a step of issuing, when

the first trigger is fired, before the network application is started up, an inquiry from said terminal equipment to a user of said terminal equipment regarding whether or not the network application may be started up, and wherein the second trigger  
5 is set only when the user consents to starting up of the network application.

62. An operation method for a terminal equipment as claimed in claim 57, further comprising a step of issuing, when the first trigger is fired, before the network application is  
10 started up, an inquiry from said terminal equipment to a user of said terminal equipment regarding whether or not the network application may be started up, and wherein the second to N+1th triggers are set only when the user consents to starting up of the network application.

63. An operation method for a terminal equipment as claimed in claim 55, further comprising a step of recording  
15 time for which the network application is executed.